

**UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK**

HACHETTE BOOK GROUP, INC.,
HARPERCOLLINS PUBLISHERS LLC, JOHN
WILEY & SONS, INC., and PENGUIN RANDOM
HOUSE LLC,

Plaintiffs

v.

INTERNET ARCHIVE and DOES 1 through 5,
inclusive,

Defendants

CASE NO. 1:20-cv-04160

**REPLY EXPERT REPORT OF
RASMUS JØRGENSEN, PH.D.**

May 27, 2022

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I. Introduction

A. Qualifications and Experience

1. I am an economist and Senior Consultant at NERA Economic Consulting (“NERA”). NERA is a global firm of economists dedicated to applying economic, finance, and quantitative principles to complex business and legal issues. I obtained my BSc, MSc, and PhD in Economics from University of Copenhagen. Prior to joining NERA, I was a Postdoctoral Research Fellow at Yale University and Professor of Economics at University of Copenhagen, where I taught undergraduate and graduate courses in econometric analysis and international economics. My research has appeared in leading peer-reviewed scientific journals, including the *American Economic Review*, and I have served as a peer reviewer for a dozen of the principal scientific journals in Economics. At NERA, my practice focuses on the economics of intellectual property, antitrust economics, and calculating economic damages in commercial disputes. On February 25, 2022, I provided an initial expert report in this matter.¹ My updated CV is attached as **Exhibit 18** to this report. I have not testified as an expert in any other litigation.

B. Assignment

2. Hachette Book Group, Inc. (“Hachette”), HarperCollins Publishers LLC (“HarperCollins”), John Wiley & Sons (“Wiley”), and Penguin Random House LLC (“Penguin Random House”) (collectively, “Plaintiffs”) allege that the Internet Archive (“IA” or “Defendant”) has infringed their copyrights by scanning, reproducing, and distributing digital copies of in-copyright print books through its digital lending library.² The suit brought by Plaintiffs against IA is based on a list of in-copyright works that IA allegedly infringed through its digital lending library.³ This list includes a total of 127 book titles (“Works-in-Suit”).⁴

¹ Expert Report of Rasmus Jørgensen, Ph.D., *Hachette Book Group, Inc., HarperCollins Publishers LLC, John Wiley & Sons, Inc., and Penguin Random House LLC v. Internet Archive*, United States District Court, Southern District of New York, February 25, 2022 (“Initial Jørgensen Report” or “my initial report”).

² Complaint, *Hachette Book Group, Inc., HarperCollins Publishers LLC, John Wiley & Sons, Inc., and Penguin Random House LLC, v. Internet Archive and DOES 1 through 5*, United States District Court, Southern District of New York, Case No: 1:20-cv-04160, June 1, 2020 (“Complaint”), ¶¶ 2-3, 6, 75, 114-115.

³ Complaint, ¶¶ 3, 20.

⁴ Complaint, Exhibit A.

3. As noted in my initial report, I was asked by Durie Tangri LLP (“counsel”), counsel for Defendant, to provide an independent opinion to assist the Court regarding matters on which expert assistance may be required in this litigation. Specifically, I have been asked to offer opinions on the following four topics: i) the amount of Internet Archive’s digital lending of the Works-in-Suit relative to other digital libraries over time; ii) the peak monthly loan totals for each of the Works-in-Suit during the period in which the National Emergency Library was in operation; iii) the impact of the Internet Archive’s use of the Works-in-Suit on the actual digital lending market based on available information from the Internet Archive and OverDrive; and iv) the impact of the Internet Archive’s use of the Works-in-Suit on Plaintiffs’ sales across book formats.

4. I have now been asked to respond to issues raised by Plaintiffs via the Rebuttal Expert Report of Jeffrey T. Prince, Ph.D., filed on April 29, 2022 (“Prince Rebuttal Report”).

C. Materials Considered

5. The opinions in this report are based on my professional training and experience, as well as my review of the Complaint, publicly available documents, discovery materials (including deposition transcripts and exhibits), and data and documents that are in the evidentiary record.⁵

6. In addition to the materials listed in Exhibit 2 of my initial report, I have listed in **Exhibit 19** any new materials I have considered in forming the opinions contained in this report. The specific information upon which I have relied is cited in the footnotes of the report.

D. Independence and Compensation Disclosure

7. I am an independent expert. I have no affiliation with any of the parties involved in the above-captioned matter. I also have no affiliation with counsel for Plaintiffs or Defendant, nor with the Court.

8. NERA was retained by counsel according to our ordinary retention terms. NERA is compensated based on time actually spent; my hourly time is billed at \$560 per hour. Neither

⁵ Throughout this report, I use terms (such as to denote documents or depositions) as defined in my initial report.

my nor NERA's compensation depends in any way on the outcome of my analyses or of this case.

II. Summary of Opinions

9. After a careful review of the Prince Rebuttal Report, none of Dr. Prince's arguments cause me to change any of my conclusions. In particular, the evidence, as presented in my initial report, is not consistent with Plaintiffs' and Dr. Prince's claims that Internet Archive's accused digital lending of the Works-in-Suit substituted for Plaintiffs' print and ebook sales, nor with library ebook lending through OverDrive.

10. In addition, I find that Dr. Prince's analyses and opinions are flawed and unreliable for the following principal reasons:

- Dr. Prince asserts without evidence that Plaintiffs have been harmed. The Prince Rebuttal Report purports to present a "logical framework" for assessing the effects of IA's accused conduct on Plaintiffs.⁶ Based on this framework, Dr. Prince simply draws an unsubstantiated conclusion that any infringement of the Works-in-Suit must necessarily cause harm to Plaintiffs without offering any analysis or evidence to support such a conclusion. (Section III)
- Dr. Prince mischaracterizes my analysis that uses the closing of the National Emergency Library ("NEL") to test for Plaintiffs' purported theory of competitive substitutes. Contrary to his assertions, my proposed methodology presents relevant and reliable evidence on the potential effects of IA's accused digital lending on Plaintiffs' sales by comparing two closely related time periods—one period in which IA offers digitized book loans of the Works-in-Suit to the following period in which consumers no longer have that option. (Section VI)

⁶ Prince Rebuttal Report, ¶ 55.

- Dr. Prince's assertion that it is "incorrect" to compare Internet Archive's accused digital lending to that of OverDrive is in direct conflict with Plaintiffs' and Dr. Prince's position that Internet Archive acted as an unlicensed aggregator displacing ebook lending through other aggregators. (Section V.A)
- Dr. Prince claims that my initial report "underestimates" the library ebook revenues Plaintiffs collect through their partnership with OverDrive. However, Dr. Prince's alternative estimates exaggerates Plaintiffs' revenue by including audiobook sales which are not at-issue in this matter. (Sections V.B and V.C)
- Dr. Prince's assertion that other market conditions changed around the time of the closing of NEL is contradicted by the very market-wide statistics on which Dr. Prince bases his opinions. This evidence is further confirmation that my initial report presents relevant estimates of potential substitution effects, if any, based on an appropriate and reliable methodology. (Section V.D)

11. In this report, I address only the main complaints Dr. Prince raises against my analysis and opinions in this matter. The fact that I do not address any particular claim made by Dr. Prince regarding my opinions should not be construed as accepting that claim.

12. I reserve the right to supplement my opinions and analysis should relevant new information become available over the course of this litigation.

III. Dr. Prince Asserts Without Evidence That Plaintiffs Have Been Significantly Harmed

13. Dr. Prince asserts that Plaintiffs have suffered significant harm from the alleged copyright infringement by Internet Archive because of its digitized book loans of the Works-in-Suit.⁷ According to the Prince Rebuttal Report, Plaintiffs have been harmed in numerous ways,

⁷ Prince Rebuttal Report, ¶¶ 29-30, 71.

including harms owing to “lost license fees, lost sales, and reduced revenue as a result of any downward effect on market prices”⁸ Yet Dr. Prince has presented no evidence or analysis attempting to quantify the purported harm, if any, to Plaintiffs’ ability to “make money from their creative works.”⁹

14. Rather, the Prince Rebuttal Report takes for given that “infring[ing] versions of products that are distributed free of charge on the Internet often substitute for the purchases of an original product”¹⁰ That is, Dr. Prince makes no distinction between the allegedly infringing conduct by IA and the potential market harm caused by that conduct. Instead, Dr. Prince simply draws an unsubstantiated conclusion that any copyright infringement of the Works-in-Suit must necessarily cause harm to Plaintiffs without offering any analysis or evidence to support such a conclusion.

15. As recognized by Dr. Prince, well-accepted methods for assessing harm include contrasting the economic position of the Plaintiffs but-for the allegedly infringing conduct with the Plaintiffs’ economic position observed in the actual world.^{11,12} However, Dr. Prince has not offered any substantive analysis or evidence that identifies the incremental revenues that Plaintiffs would likely have made, if any, in a properly defined but-for scenario. Instead, Dr.

⁸ Prince Rebuttal Report, ¶ 54.

⁹ Prince Rebuttal Report, ¶¶ 29-30.

¹⁰ Prince Rebuttal Report, ¶ 30.

¹¹ Prince Rebuttal Report, ¶ 82 (“To determine whether or not IA’s conduct caused harm to the Plaintiffs, one would have to generate reasonable estimates of Plaintiffs’ revenues from the sale and licensing of ebooks and print books to libraries and consumers under a but-for scenario in which the only difference in market conditions is that IA did not infringe Plaintiffs’ copyrighted works”).

¹² The concept of a but-for world for quantifying damages is explained in the Reference Manual on Scientific Evidence as “[t]he characterization of the harmful event begins with a clear statement of what occurred. The characterization also will include a description of the defendant’s proper action in place of its unlawful actions and a statement about the economic situation absent the wrongdoing, with the defendant’s proper actions replacing the unlawful ones (the but-for scenario). Damages measurement then determines the plaintiff’s hypothetical value in the but-for scenario. Economic damages are the difference between that value and the actual value that the plaintiff achieved. Because the but-for scenario differs from what actually happened only with respect to the harmful act and exclude any change in the plaintiff’s value arising from other sources. Thus, a proper construction of the but-for scenario and measurement of the hypothetical but-for plaintiff’s value by definition includes in damages only *caused* by the harmful act.” See Mark A. Allen, Robert E. Hall, and Victoria A. Lazear, “Reference Guide on Estimation of Economic Damages,” *Reference Manual on Scientific Evidence*, Third Edition, Washington, DC: The National Academies Press, 2011, p. 423.

Prince makes several contradictory assertions about the potential sources of harm that Plaintiffs purportedly have suffered.¹³

16. Although Dr. Prince was asked to “[a]ssess the effect of Internet Archive’s alleged infringing conduct on Plaintiffs,” the Prince Rebuttal Report presents no actual evidence or analysis of the potential lost sales or other harms to the Plaintiffs which are attributable to IA’s digital library lending.¹⁴ Instead, Dr. Prince simply asserts without evidence that any infringement of the Works-in-Suit must necessarily cause harm to Plaintiffs.

IV. The Closing of the National Emergency Library Demonstrates that Internet Archive’s Digitized Book Loans Did Not Substitute for Plaintiffs’ Book Sales or OverDrive’s Digital Lending

17. Dr. Prince has presented no analysis or evidence regarding Plaintiffs’ ability to capture incremental sales in a but-for world in which IA’s digitized book loans are no longer available to consumers. That is, Dr. Prince has not assessed to what extent, if any, that IA’s accused digital library lending substituted for any of the Plaintiffs’ book offerings (across formats and segments). In contrast, my initial report explicitly analyzed how the Plaintiffs’ ebook sales and paperback book sales changed in response to the distinct event in which IA closed the National Emergency Library and removed the Works-in-Suit from its digital lending library.¹⁵ This analysis—which my initial report referred to as a natural experiment—was designed specifically to assess the degree of substitutability between IA’s accused digital library lending of the Works-in-Suit and Plaintiffs’ ebook and paperback book sales of the same titles. The Initial Jørgensen Report investigated this question by comparing changes in the outcomes of interest between the second and third quarter of 2020—i.e., two quarters that immediately followed each other and that also marked a significant shift in IA’s digital lending policies for

¹³ Prince Rebuttal Report, ¶¶ 29-30, 54-57, 70. Dr. Prince’s contradictory assertions include claiming that IA has failed to pay Plaintiffs for the rights to distribute the Works-in-Suit as part of its digital lending library, while also claiming that IA’s accused conduct likely caused Plaintiffs lost sales. See Prince Rebuttal Report, ¶ 56 (“by scanning a print book, putting the digitized copy . . . on its [website] and distributing it, and failing to pay the Plaintiffs a fee for the digital distribution rights, IA harms the Plaintiffs.”), and Prince Rebuttal Report, ¶ 101 (“[T]here were potential revenues that Plaintiff Publishers lost as a result of Internet Archive’s actions.”).

¹⁴ Prince Rebuttal Report, ¶ 7.

¹⁵ Initial Jørgensen Report, ¶¶ 54-58.

the Works-in-Suit. In Q2, the National Emergency Library was up and running for most of the quarter. In fact, more than half of IA's accused digitized book loans during 2017-2020 were lent out during NEL.¹⁶ By Q3, IA had decided to end NEL and effectively removed the Works-in-Suit from its digital lending library. Consequently, the natural experiment considered in my initial report examines the changes in Plaintiffs' ebook and paperback book sales during a time in which IA went from offering concurrent digitized book loans of the Works-in-Suit that were not limited in number to offering virtually none. To the extent that IA's digitized book loans of the Works-in-Suit acted as a competing substitute for the Plaintiffs' sales, one would expect to detect this effect following the closing of NEL. Moreover, this natural experiment is analogous to the but-for methodology discussed above as it compares two closely related time periods—one in which IA offers digitized loans of the Works-in-Suit and one in which consumers no longer have that option. As stated in my initial report, the evidence is not consistent with Plaintiffs' purported theory of competitive substitutes.¹⁷ That is, the evidence is not consistent with significant lost sales (i.e., harm) to Plaintiffs.

18. My initial report tested also for possible substitution effects between IA's and OverDrive's digital lending of the Works-in-Suit following the closing of NEL using the natural experimental methodology discussed above. For this specific distribution channel, the evidence is not consistent with Plaintiffs' purported theory that IA's digitized book loans act as substitutes for digital lending of the Works-in-Suit through OverDrive.¹⁸ Dr. Prince claims that "[d]uring the time period of the so-called 'National Emergency Library,' when the Internet Archive abandoned the 1:1 own-to-loan and all waitlists for books, market harm likely was even greater."¹⁹ However, my initial report demonstrates that the National Emergency Library, in which IA did not limit the number of concurrent loans by technical means, had no measurable impact on digital lending of the Works-in-Suit through OverDrive or on Plaintiffs' paperback and ebook sales of the titles at-issue.

¹⁶ Initial Jørgensen Report, **Exhibit 4**.

¹⁷ Initial Jørgensen Report, ¶¶ 54-58.

¹⁸ Initial Jørgensen Report, ¶¶ 47-53.

¹⁹ Prince Rebuttal Report, ¶ 9.

V. Dr. Prince's Rebuttal Opinions Are Fundamentally Flawed

19. Dr. Prince presents several inconsistent and misguided rebuttal opinions in his report. As discussed below, Dr. Prince's critiques of my initial report are unfounded and fundamentally flawed.

A. Data on OverDrive Checkouts Provides Relevant Information for Testing Plaintiffs' Theory of Competitive Substitutes

20. According to the Prince Rebuttal Report, IA is "akin to a library ebook aggregator"²⁰ and its digitized book loans act, according to Dr. Prince, as free substitutes for the digital lending offered by OverDrive and other aggregators.²¹ However, Dr. Prince has presented no empirical analysis of the demand for IA's digitized books loans and his assertions regarding a potential substitutability between IA's and OverDrive's digital library lending offerings are not informed by any actual evidence.²²

21. In contrast, my initial report analyzed the extent to which IA's digitized book loans acted as a competing substitute for OverDrive's ebook loans using actual digital lending data from IA and OverDrive.²³ Dr. Prince claims that my initial report does not "discuss or attempt to justify" the choice to analyze OverDrive checkout data as opposed to OverDrive revenue data.²⁴ This rebuttal point raised by Dr. Prince is flawed and contradicts basic economic theory.

22. In his report, Dr. Prince conjectures that when a free "competing product enters the market, economists generally expect to observe a shift in consumer demand toward the free good," while also noting that the shift in demand will be "determined by consumers' perceptions

²⁰ Prince Rebuttal Report, ¶ 14 ("Internet Archive describes itself as a library. IA also serves a function akin to a library ebook aggregator (a centralized entity that makes short-term 'loans' or distributions of ebooks published by many different publishers to users, with DRM protection to prevent further copy by the user)") (footnote omitted).

²¹ Prince Rebuttal Report, **Section III.B** and ¶¶ 27-28 ("if two products are highly differentiated, the demand for the higher-priced and higher-quality incumbent may be little affected by the presence of a zero-price alternative. On another extreme, if two products are identical, when a zero-priced competing product enters the market, it displaces *all* of the demand for the higher-priced product. The introduction of a zero-priced substitute of the sort effected by IA is more consistent with limited, rather than high, product differentiation. Therefore, it likely displaces legal sales.") (footnotes omitted).

²² See, e.g., Prince Rebuttal Report, ¶ 28 and fn. 86.

²³ Initial Jørgensen Report, ¶¶ 8, 47-53.

²⁴ Prince Rebuttal Report, ¶ 80.

of the degree of substitutability (*i.e.*, similarity) between the higher-priced product and the free product.”²⁵ Dr. Prince goes on to define substitute products as “two good such that if the price of one increases, more of the other good will be demanded.”²⁶ That is, basic demand theory, as summarized by Dr. Prince, considers changes in demand in terms of the quantities demanded. Consequently, my initial report analyzes these very economic variables—*i.e.*, units of demand for IA’s and OverDrive’s digital library lending—to test for potential substitution effects in accordance with the economic framework outlined by the Prince Rebuttal Report.

23. Unlike Dr. Prince, my initial report offers opinions based on actual data on digital library lending available in the evidentiary record. The Initial Jørgensen Report outlines a methodology for quantifying the number of digitized book loans of the Works-in-Suit using data produced by IA.²⁷ Dr. Prince has not challenged this methodology, nor my finding that IA patrons digitally borrowed the Works-in-Suit about 57,000 times between 2017 and 2020.²⁸

24. Dr. Prince further claims that I am “incorrect to compare Internet Archive’s loans in relation to OverDrive lending because relative statistics obfuscate the total volume of Internet Archive’s loans.”²⁹ That is, on one hand, Dr. Prince opines that IA is “akin to a library ebook aggregator” whose digital offerings act as “substitutes” for OverDrive’s digital lending services, yet he also claims that it is “incorrect” to compare the digital library lending across the two platforms. In this case, Dr. Prince’s rebuttal opinion is misguided and contradicted by his own characterization of IA’s alleged conduct. To the extent that Plaintiffs and Dr. Prince accuse IA of acting as an aggregator, it is appropriate to contrast the activities of one entity to another similarly positioned entity.³⁰ The relative volume statistics presented in my initial report are doing just that. However, to the extent that Dr. Prince is of the opinion that it is “incorrect” to

²⁵ Prince Rebuttal Report, ¶¶ 26-27.

²⁶ Prince Rebuttal Report, ¶ 26, fn.79.

²⁷ See, e.g., Initial Jørgensen Report, fn. 83 and **Exhibit 3**.

²⁸ I understand that Dr. Foster, one of Plaintiffs’ experts, have found “a total of 46,305 total loans of the Works in Suit” between March 2017 and September 2020. See Prince Rebuttal Report, fn. 275.

²⁹ Prince Rebuttal Report, ¶ 101.

³⁰ Although Dr. Prince opines that it is “incorrect” to compare IA’s digitized book loans to OverDrive’s ebook checkouts, the Prince Rebuttal Report goes on to reference that very statistics when describing IA’s activities during the National Emergency Library. As such, Dr. Prince appears to opine that relative volumes are only relevant when used by him. See Prince Rebuttal Report, ¶ 108 (“Dr. Jørgensen’s report indicates that during the three-month period of the National Emergency Library, the relative volume of Internet Archive’s unauthorized distributions was, on average, 11% . . .”).

compare IA's loan volume to OverDrive's checkouts for the Works-in-Suit, it must be because Dr. Prince considers the two entities to offer non-substitute products—which would contradict the entire premise of Dr. Prince's opinions. For these reasons, Dr. Prince is incorrect to challenge the relative volume statistics presented in my initial report.

25. The Initial Jørgensen Report analyzed the 127 Works-in-Suit for which there is relevant *and* available data from IA and OverDrive in the evidentiary record. As stated in my initial report, I was asked to analyze the amount of Internet Archive's digital lending of the Works-in-Suit relative to other digital libraries over time, among other things.³¹ Dr. Prince incorrectly opines that the Jørgensen Initial Report understates IA's loan volume by "not consider[ing] the 33,003 Works titles published by the Plaintiffs on [IA's website] in digital and print form"³² In this case, Dr. Prince's challenge is inappropriate and highly speculative. As stated in my initial report, my assignments were limited to the 127 Works-in-Suit listed by the Plaintiffs in their suit against IA. Moreover, it would be inappropriate and highly speculative to offer opinions about titles that are not in the suit (and for which the parties have not produced relevant data and documents on during discovery).³³

B. As Acknowledged by Dr. Prince, the Data Provided by OverDrive Does Not Identify Incremental Revenue per Checkout

26. Dr. Prince makes several contradictory and false statements about my initial report's use and analysis of the revenue data provided by OverDrive. First, Dr. Prince incorrectly claims that I did not "rely on OverDrive revenue data that was produced in this matter."³⁴ However, the OverDrive data that Dr. Prince refers to is listed among the materials

³¹ Initial Jørgensen Report, ¶ 3.

³² Prince Rebuttal Report, ¶ 108.

³³ Dr. Prince notes, moreover, that his assessment of the potential harms that Plaintiffs purport to have suffered applies to all of Plaintiffs' works available through IA's digitized book lending at present or in the future. That is, Dr. Prince offers opinions that are not tethered to the facts of the case and are therefore speculative. See Prince Rebuttal Report, ¶ 55 ("The approach I discuss in this section is a logical framework for understanding not only how IA's conduct affects Plaintiffs with respect to the Works in Suit, but also how IA's challenged conduct affects the Plaintiffs for their other works that IA is distributing without authorization"). See also Prince Rebuttal Report, ¶ 66 ("My analysis also includes the impact of Internet Archive's actions as a result of further widespread conduct by Internet Archive or similar conduct by other market participants, including if the court were to condone IA's conduct.").

³⁴ Prince Rebuttal Report, ¶ 80 and fn. 215.

considered in **Exhibit 2** of the Initial Jørgensen Report.³⁵

Dr. Prince even acknowledges the “complex relationship between checkouts and revenues from library sales.”³⁹

27. The Initial Jørgensen Report analyzed the impact of IA's accused digital lending on OverDrive checkouts of the Works-in-Suit, which is not only appropriate for testing Plaintiffs' and Dr. Prince's purported theory of competing substitute products (see **Section V.A**), it is also based on consistent and reliable OverDrive checkout data produced in this matter. Dr. Prince asserts without evidence that Plaintiffs' purported harm should be measured in terms of *lost sales*. [REDACTED]

C. Dr. Prince's Estimate of Plaintiffs' License Revenue Collected Through OverDrive Is not "More Appropriate"

28. Dr. Prince claims that my initial report “underestimates Plaintiff Publishers’ revenues from library ebooks collected through OverDrive.”⁴⁰ I disagree. The Initial Jørgensen Report showed that the Works-in-Suit generated [REDACTED] in OverDrive revenue between 2017-2020 (i.e., over the full period in which OverDrive revenue data is available).⁴¹

³⁵ See also Initial Jørgensen Report, Exhibits 3, 4, 6a, 6b, 7a, 7b, 8a, 8b, 9a, and 9b.

³⁶ Prince Rebuttal Report, fn. 214.

³⁷ Initial Jørgensen Report, ¶¶ 25-29.

³⁸ Initial Jørgensen Report, ¶ 29.

³⁹ Prince Rebuttal Report, ¶ 80.

⁴⁰ Prince Rebuttal Report, ¶ 101.

⁴¹ Initial Jørgensen Report, ¶ 35.

[REDACTED]

29. The Prince Rebuttal Report purports to report a “more appropriate alternative estimate based on Plaintiffs’ actual sales” using sales data produced by the Plaintiffs. Dr. Prince claims that Hachette, Penguin Random House, and HarperCollins have combined sales to OverDrive of approximately \$1.56 million between 2017 and 2020.⁴⁵ However, his proposed estimate overstates Plaintiffs’ revenues, as Dr. Prince includes Plaintiffs’ OverDrive sales from audiobooks.⁴⁶ Dr. Prince uses this sales figure to challenge the revenue estimates presented in my initial report, yet he has not established that the revenue data produced by OverDrive omits any sales that Plaintiffs’ sales would include. That is, Dr. Prince has not provided any evidence to justify that his “alternative estimate” is a more reliable measure of Plaintiffs’ revenues. As such, Dr. Prince has done nothing more than identify a potential discrepancy in the evidentiary

⁴² Initial Jørgensen Report, ¶ 24.

⁴³ Initial Jørgensen Report, ¶ 35.

⁴⁴ [REDACTED]

⁴⁵ Prince Rebuttal Report, ¶ 105.

⁴⁶ [REDACTED]

record. Moreover, this estimate does not inform any of the opinions I have reached in this matter.⁴⁷

D. Contrary to Dr. Prince’s Insinuations, the Closing of NEL Provides Relevant and Reliable Evidence on the Market Impact of Internet Archive’s Accused Digital Lending of the Works-in-Suit

30. The Prince Rebuttal Report incorrectly portrays the opinions offered in my initial report as “unreliable” because my empirical methodology, according to Dr. Prince, fails to account for other relevant market factors.⁴⁸ As discussed below, Dr. Prince’s rebuttal opinions are unfounded and, in several instances, based on misrepresentations of my initial report and the basic facts of this matter.

31. According to Dr. Prince, the Initial Jørgensen Report fails to distinguish “the causal effect of IA’s conduct and other causal factors unrelated to IA’s conduct over the same period of interest.”⁴⁹ I disagree. The experiment considered in my initial report analyzed and contrasted *changes* in IA’s digitized books loans of the Works-in-Suit from Q2 to Q3 in 2020 to *changes* in, e.g., OverDrive’s digital lending by title over the same time period. This before-and-after comparison is a well-accepted and common statistical approach that accounts for other relevant factors that are approximately unchanged across the two periods.⁵⁰

32. The Prince Rebuttal Report claims that the book industry in general, and Plaintiffs in particular, were impacted by a myriad of changing market conditions in 2020, including the COVID-19 pandemic, kids attending virtual school from home, the Black Lives Matter movement, a nationwide focus on racial justice issues, the closing and re-opening of libraries and brick-and-mortar stores, a spike in demand for books on certain leisurely topics (e.g., cooking, children’s activity books), the U.S. presidential election, supply chain issues, and general macroeconomic conditions.⁵¹ Despite Dr. Prince’s proposed laundry list of potential confounding factors, his report presents no actual analysis or alternative modelling that

⁴⁷ See, e.g., the summary opinions of the Initial Jørgensen Report.

⁴⁸ Prince Rebuttal Report, ¶ 85.

⁴⁹ Prince Rebuttal Report, ¶ 82.

⁵⁰ American Bar Association (ABA) Section on Antitrust Law, *Econometrics*, second edition, ABA Publishing, 2014, p. 302.

⁵¹ Prince Rebuttal Report, ¶¶ 77, 82-84.

challenges the empirical evidence presented in my initial report. Moreover, in most instances, Dr. Prince has not even attempted to quantify or otherwise measure the effects of the market factors he claims to be important. As such, Dr. Prince's rebuttal opinions amount to nothing more than conjecturing with no reasonable basis in facts.

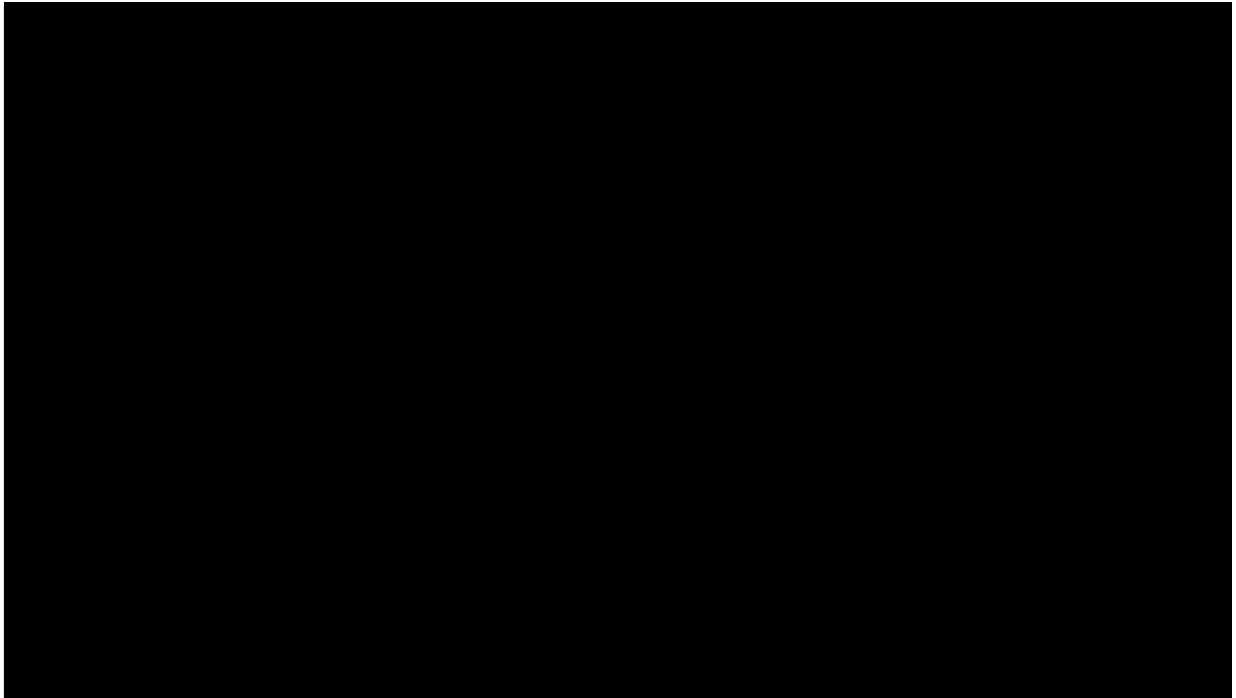
33. Dr. Prince further asserts that a “quantitative model of harm to Plaintiffs from IA’s conduct” should account for seasonality.⁵² The Prince Rebuttal Report goes on to explain that one should “consider the possibility that to the extent the demand for Plaintiffs Works in Suit declined [REDACTED], some of it could be attributed to the end of the academic year and school-required reading.”⁵³ In support of this claim, Dr. Prince presents ebook sales statistics produced by the Association of American Publishers (“AAP”) for the titles included in the “Children’s and Young Adult“ segment. [REDACTED]

As such, the evidence is utterly inconsistent with Dr. Prince's opinion. Furthermore, the monthly sales statistics reported by the AAP for 2019 are not indicative of strong seasonal trends in the ebook sales of Children's and Young Adult titles, thus providing further support for the empirical analysis presented in my initial report.


⁵² Prince Rebuttal Report, ¶ 83.

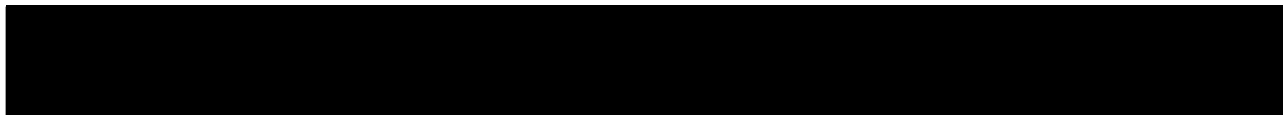
⁵³ Prince Rebuttal Report, ¶ 83.

⁵⁴ Prince Rebuttal Report, fn. 222.



34. The Prince Rebuttal Report claims that the “re-opening of physical libraries and bookstores” during the summer of 2020 were also important sources of changing market conditions between Q2 and Q3 in 2020.⁵⁶ However, Dr. Prince presents no direct evidence in support of these statements. The Prince Rebuttal Report merely notes that only one percent of libraries were fully open with no restrictions by mid-May in 2020, with another 62 percent of libraries being fully closed.⁵⁷ Still, Dr. Prince presents no evidence demonstrating to what extent these conditions had changed by Q3 2020, including whether traditional library lending of the Works-in-Suit increased, if at all, between Q2 and Q3.

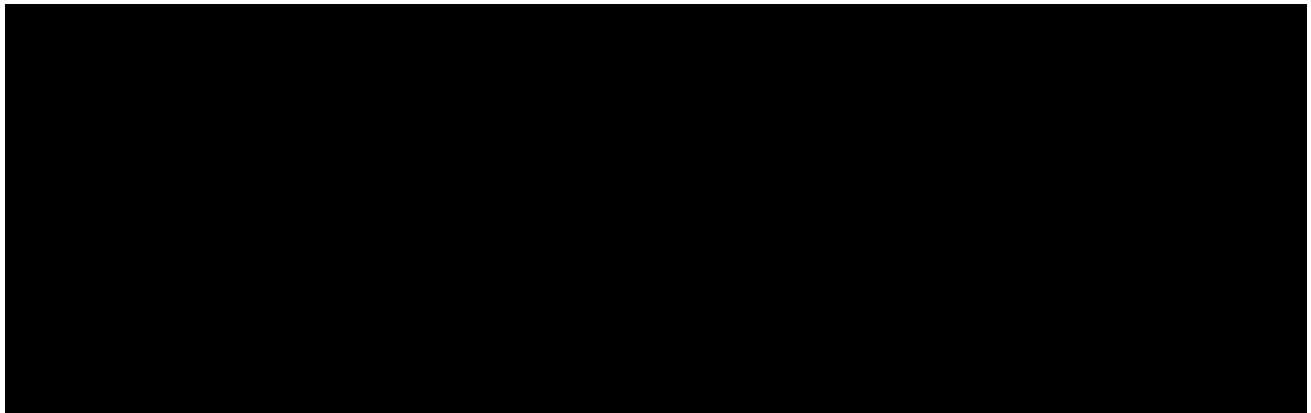
35. Dr. Prince further asserts that ebook sales slowed down around the time that libraries and bookstores were re-opening—which Dr. Prince claims to have happened during the summer of 2020.⁵⁸ 



⁵⁶ Prince Rebuttal Report, ¶ 84.

⁵⁷ Prince Rebuttal Report, fn. 230.

⁵⁸ Prince Rebuttal Report, ¶ 84.



36. In sum, Dr. Prince claims that a myriad of market conditions changed in 2020—which he then incorrectly contends that my initial report failed to consider.⁶¹ However, the AAP sales statistics considered by Dr. Prince show just a slight decline in the overall ebook market between Q2 and Q3 in 2020. Moreover, the ebook sales statistics from 2019, which Dr. Prince points to in support of seasonality, show an absence of seasonal trends.⁶² As such, the evidence presented in the Prince Rebuttal Report affirms that the overall ebook market was relatively stable between Q2 and Q3. [REDACTED]

[REDACTED]

37. [REDACTED]

[REDACTED]

⁵⁹ Prince Rebuttal Report, fn. 231.

⁶⁰ Prince Rebuttal Report, fn. 231.

⁶¹ [REDACTED]

⁶² See **Figure 1**.

⁶³ Prince Rebuttal Report, ¶¶ 9, 50, 59, 72.

⁶⁴ OVERDRIVE000000003.

■⁶⁵ In comparison, the Prince Rebuttal Report shows a decline of less than three percent in the overall ebook market, which accounts for every one of the changing conditions that Dr. Prince purports to have taken place.⁶⁶ ■

■ As such, none of Dr. Prince’s purported “other market factors” change the opinions stated in my initial report.

38. As stated in my initial report, one would expect to find consistent increases in OverDrive checkouts for the Works-in-Suit following the closing of the National Emergency Library under Plaintiffs’ purported theory that IA’s digitized book loans acted as “competitive substitutes” for OverDrive’s digital lending. Instead, the evidence, as reported in my initial report, shows ■⁶⁷

Therefore, the evidence is not consistent with Plaintiffs’ theory that IA’s digitized book loans of the Works-in-Suit reduced digital lending through OverDrive. ■

■ The Initial Jørgensen Report concluded therefore that the closing of NEL was not associated with “increased ebook sales to Hachette, as one would expect according to Plaintiffs’ purported theory of ‘competing’ substitutes.”⁶⁸

39. ■

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⁶⁵ Initial Jørgensen Report, **Exhibit 5**, and Backup Materials.

⁶⁶ Prince Rebuttal Report, fn. 231.

⁶⁷ Initial Jørgensen Report, ¶¶ 50-53, **Exhibits 14** and **15**.

⁶⁸ Initial Jørgensen Report, ¶¶ 58, **Exhibits 17a** and **17b**.

⁶⁹ ■

⁷⁰ Initial Jørgensen Report, **Exhibit 16a**.

⁷¹ Initial Jørgensen Report, ¶¶ 57.

[REDACTED]

40. Dr. Prince asserts that my initial report “did not examine the effect of IA’s conduct on any other plaintiff besides Hachette.”⁷³ Contrary to Dr. Prince’s claims, my initial report was not able to test Plaintiffs’ purported theory of competing substitutes, except in the case of Hachette, due to the limited data produced in this matter by HarperCollins, Penguin Random House, and Wiley.⁷⁴ As stated in my initial report, it is not possible to examine the effects of NEL, if any, on Plaintiffs’ book sales using the annual data that HarperCollins, Penguin Random House, and Wiley have produced in this matter since the closing of NEL happened in mid-2020.⁷⁵

I respectfully reserve the right to update the conclusions expressed above should additional information become available to me.



Rasmus Jørgensen, Ph.D.
May 27, 2022

⁷² See, e.g., the summary opinions of the Initial Jørgensen Report.

⁷³ Prince Rebuttal Report, ¶ 80.

⁷⁴ Initial Jørgensen Report, ¶ 54.

⁷⁵ Initial Jørgensen Report, ¶ 54.



NERA Economic Consulting



EXHIBIT 18

Rasmus Jørgensen, Ph.D.

Dr. Jørgensen is a Senior Consultant in NERA's Intellectual Property Practice, where he provides economic research and analysis to support complex litigation. His areas of focus are conducting damages analysis in the context of patent infringement, misappropriation of trade secrets, breaches of contract, and anticompetitive behavior. Dr. Jørgensen has expertise in applying rigorous economic and econometric methods to calculate lost profits, reasonable royalty, and economic damages in a wide range of industries, including aerospace, consumer goods, transportation, pharmaceuticals, and power generation.

Education

University of Copenhagen

Ph.D., Economics, 2011

M.Sc., Economics, 2009

B.Sc., Economics, 2005

Princeton University

Visiting graduate student, 2008-2010

Professional Experience

2019-	NERA Economic Consulting Senior Consultant
2014-2019	University of Copenhagen Assistant Professor Taught courses in Statistics, Econometrics, and International Trade for undergraduate and graduate students.
2013-2014	University of Copenhagen Postdoctoral Research Fellow
2011-2013	Yale University Postdoctoral Research Fellow

Written Testimony

Expert Report of Rasmus Jørgensen, Ph.D., *Hachette Book Group, Inc., HarperCollins Publishers LLC, John Wiley & Sons, Inc., and Penguin Random House LLC v. Internet Archive*, United States District Court, Southern District of New York, February 25, 2022.

Honors and Professional Activities

Fulbright Scholarship, Princeton University, 2008.

Postdoctoral Research Grant, Independent Research Fund Denmark, 2011.

The Invisible Hand Award (teacher of the year award), University of Copenhagen, 2014.

Publications

“Does Temporary Generic Competition Have a Lasting Impact on Branded Drug Sales?” (with D. Blackburn), NERA White Paper, 2021.

“The Wage Effects of Offshoring: Evidence from Danish Matched Worker-Firm Data” (with D. Hummels, J.R. Munch and C. Xiang), *American Economic Review*, 104(6), 2014.

“Understanding Cross-country differences in Export Premia” (with Joachim Wagner, et al.), *Review of World Economics*, 144(4), 2008.

“Defining and Measuring Entrepreneurship” (with J. Iversen and N. Malchow-Møller), *Foundations and Trends in Entrepreneurship*, 4(1), 2008.

Referee

American Economic Journal: Applied Economics, Canadian Journal of Economics, Danish Journal of Economics, Economic Inquiry, European Economic Review, Industrial Relations, Journal of Economic Behavior & Organization, Journal of Human Resources, Journal of Labor Economics, Labour Economics, Oxford Bulletin of Economics and Statistics, Review of International Economics, Review of World Economics, Scandinavian Journal of Economics, the Economic Journal.